

SOLO® ADSS Short-Span Cables, 12-144 Fibers

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Features and Benefits

Loose tube design

Stable performance and compatibility with all common fiber types

Self-supporting

Easy, one-step installation

Track-resistant jacket available

Suitable for installations up to 25 kV electric field potential

Innovative waterblocking cable core

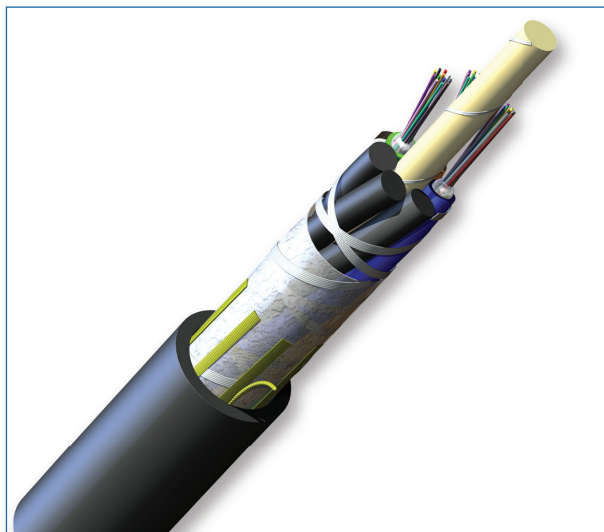
Provides efficient and craft-friendly cable preparation

Standards

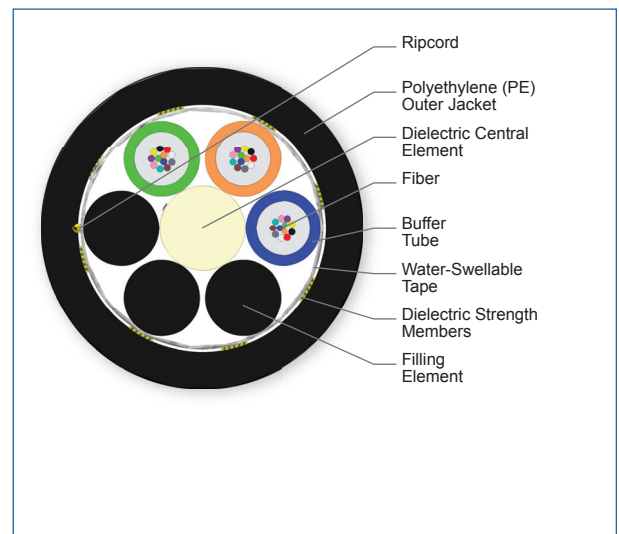
Approvals and Listings	RDUP 7 CFR 1755.900 (formerly RUS)
Common Installations	Outdoor self-supporting aerial
Design and Test Criteria	ANSI/ICEA S-87-640
Preformed Line Products® (PLP®) Dead-End Product	FIBERLIGN® dead-end for ADSS limited-tension dead-end

Corning SOLO® ADSS short-span cables are all-dielectric, self-supporting (ADSS) cables designed for easy and economical one-step installation in campus backbones with self-supporting installations where metallic messengers cannot be used. The loose tube design provides stable performance over a wide temperature range and is compatible with any telecommunications-grade optical fiber. The economical single-jacket design can span distances up to 600 ft in NESC light conditions, 500 ft in NESC medium conditions and 300 ft in NESC heavy conditions (see sag and tension chart for details).

This cable incorporates innovative waterblocking materials, eliminating the need for traditional flooding compound and providing efficient and craft-friendly cable preparation. While the concentric, self-supporting cable design allows easy, one-step installation using standard hardware and installation methods, the SZ-stranded, loose tube design isolates optical fibers from installation and environmental rigors and facilitates mid-span access. The ADSS optical cables are also available with a proprietary track-resistant polyethylene (TRPE) jacket suitable for installation in electric field potentials up to 25 kV.



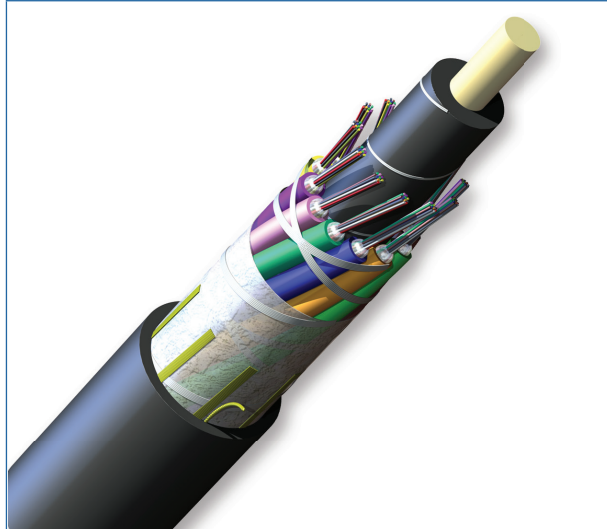
SOLO ADSS Short-Span Cables, 36 Fibers
| Photo PIM0637



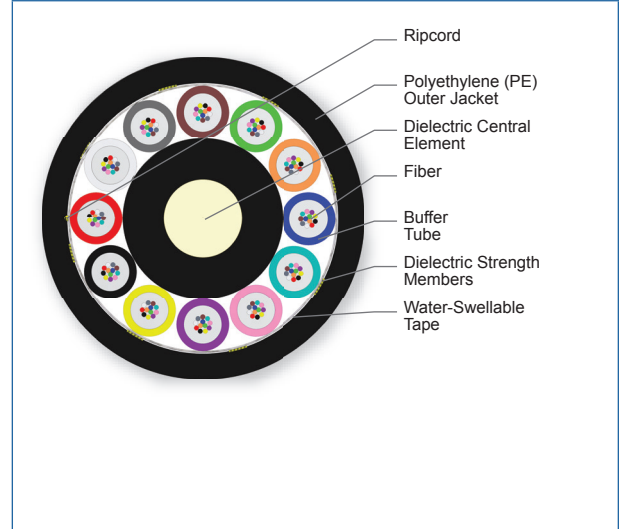
SOLO ADSS Short-Span Cables, 36 Fibers
| Photo PIM1536

SOLO[®] ADSS Short-Span Cables, 12-144 Fibers

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SOLO ADSS Short-Span Cables, 144 Fibers
| Photo PIM0642



SOLO ADSS Short-Span Cables, 144 Fibers
| Photo PIM1541

Specifications

Temperature Range	
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	-30 °C to 70 °C (-22 °F to 158 °F)
Operation	-40 °C to 70 °C (-40 °F to 158 °F)

* Note: Corning recommends storing cable in a proper temperature environment prior to installation to allow the cable temperature to meet installation temperature range specifications for best installation results.

Fiber Count	Number of Tube Positions	Number of Active Tubes	Weight	Nominal Outer Diameter	Min. Bend Radius Installation	Min. Bend Radius Operation
12 - 72	6	1 - 6	92 kg/km (62 lb/1000 ft)	10.9 mm (0.43 in)	164 mm (6.5 in)	109 mm (4.3 in)
96	8	8	122 kg/km (82 lb/1000 ft)	12.6 mm (0.50 in)	189 mm (7.5 in)	126 mm (5.0 in)
144	12	12	196 kg/km (132 lb/1000 ft)	16.1 mm (0.63 in)	242 mm (9.5 in)	161 mm (6.3 in)

* Longer spans available on request.

Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2011/65/EU

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Installation Conditions

12-72 Fibers

Code Short MDPE	1% Initial Installation SAG (Vertical)	NESC Light		NESC Medium		NESC Heavy	
		Vertical SAG (%)	Tension	Vertical SAG (%)	Tension	Vertical SAG (%)	Tension
Span	Tension	Vertical SAG (%)	Tension	Vertical SAG (%)	Tension	Vertical SAG (%)	Tension
50 ft (15 m)	39 lbf (171 N)	0.4	109 lbf (485 N)	1.7	155 lbf (690 N)	2.4	230 lbf (1024 N)
100 ft (30 m)	77 lbf (343 N)	0.5	190 lbf (846 N)	2.0	264 lbf (1173 N)	2.9	383 lbf (1705 N)
150 ft (46 m)	116 lbf (514 N)	0.5	262 lbf (1167 N)	2.2	358 lbf (1594 N)	3.2	515 lbf (2292 N)
200 ft (61 m)	154 lbf (685 N)	0.5	329 lbf (1463 N)	2.3	445 lbf (1980 N)	3.5	635 lbf (2827 N)
250 ft (76 m)	193 lbf (857 N)	0.6	392 lbf (1744 N)	2.5	527 lbf (2342 N)	3.7	748 lbf (3326 N)
300 ft (91 m)	231 lbf (1028 N)	0.6	453 lbf (2014 N)	2.6	604 lbf (2687 N)	3.9	854 lbf (3799 N)
350 ft (107 m)	270 lbf (1199 N)	0.6	511 lbf (2274 N)	2.7	679 lbf (3019 N)	4.1	956 lbf (4252 N)
400 ft (122 m)	308 lbf (1371 N)	0.6	568 lbf (2527 N)	2.8	751 lbf (3339 N)	4.2	1054 lbf (4688 N)
450 ft (137 m)	347 lbf (1542 N)	0.6	624 lbf (2774 N)	2.9	821 lbf (3650 N)	4.4	1149 lbf (5111 N)
500 ft (152 m)	385 lbf (1713 N)	0.7	678 lbf (3016 N)	3.0	889 lbf (3954 N)	4.5	1242 lbf (5523 N)
550 ft (168 m)	424 lbf (1885 N)	0.7	732 lbf (3254 N)	3.0	956 lbf (4251 N)		
600 ft (183 m)	462 lbf (2056 N)	0.7	784 lbf (3488 N)	3.1	1021 lbf (4543 N)		
650 ft (198 m)	501 lbf (2227 N)	0.7	836 lbf (3719 N)	3.2	1086 lbf (4829 N)		
700 ft (213 m)	539 lbf (2399 N)	0.7	887 lbf (3947 N)	3.2	1149 lbf (5111 N)		
750 ft (229 m)	578 lbf (2570 N)	0.7	938 lbf (4172 N)	3.3	1211 lbf (5388 N)		
800 ft (244 m)	616 lbf (2742 N)	0.7	988 lbf (4394 N)				
850 ft (259 m)	655 lbf (2913 N)	0.7	1038 lbf (4615 N)				
900 ft (274 m)	693 lbf (3084 N)	0.7	1087 lbf (4834 N)				
950 ft (290 m)	732 lbf (3256 N)	0.8	1135 lbf (5051 N)				
1000 ft (305 m)	770 lbf (3427 N)	0.8	1184 lbf (5266 N)				
1050 ft (320 m)	809 lbf (3598 N)	0.8	1232 lbf (5479 N)				

73-96 Fibers

Code Short MDPE	1% Initial Installation SAG (Vertical)	NESC Light		NESC Medium		NESC Heavy	
		Vertical SAG (%)	Tension	Vertical SAG (%)	Tension	Vertical SAG (%)	Tension
Span	Tension	Vertical SAG (%)	Tension	Vertical SAG (%)	Tension	Vertical SAG (%)	Tension
50 ft (15 m)	51 lbf (228 N)	0.5	129 lbf (572 N)	1.7	174 lbf (774 N)	2.3	254 lbf (1132 N)
100 ft (30 m)	102 lbf (455 N)	0.5	225 lbf (1000 N)	1.9	297 lbf (1321 N)	2.8	424 lbf (1888 N)
150 ft (46 m)	153 lbf (683 N)	0.6	311 lbf (1382 N)	2.1	405 lbf (1800 N)	3.1	571 lbf (2541 N)
200 ft (61 m)	205 lbf (910 N)	0.6	391 lbf (1738 N)	2.3	504 lbf (2240 N)	3.4	705 lbf (3138 N)
250 ft (76 m)	256 lbf (1138 N)	0.6	467 lbf (2076 N)	2.4	597 lbf (2656 N)	3.6	831 lbf (3697 N)
300 ft (91 m)	307 lbf (1365 N)	0.6	540 lbf (2401 N)	2.5	686 lbf (3052 N)	3.7	950 lbf (4228 N)
350 ft (107 m)	358 lbf (1593 N)	0.7	611 lbf (2716 N)	2.6	772 lbf (3435 N)	3.9	1065 lbf (4737 N)
400 ft (122 m)	409 lbf (1820 N)	0.7	680 lbf (3024 N)	2.7	856 lbf (3806 N)	4.1	1175 lbf (5228 N)
450 ft (137 m)	460 lbf (2048 N)	0.7	748 lbf (3325 N)	2.8	937 lbf (4167 N)	4.2	1283 lbf (5706 N)
500 ft (152 m)	511 lbf (2275 N)	0.7	814 lbf (3621 N)	2.9	1016 lbf (4520 N)	4.3	1387 lbf (6170 N)
550 ft (168 m)	563 lbf (2503 N)	0.7	879 lbf (3912 N)	2.9	1094 lbf (4866 N)		
600 ft (183 m)	614 lbf (2730 N)	0.7	944 lbf (4199 N)	3.0	1170 lbf (5207 N)		
650 ft (198 m)	665 lbf (2958 N)	0.8	1008 lbf (4483 N)	3.0	1246 lbf (5541 N)		
700 ft (213 m)	716 lbf (3185 N)	0.8	1071 lbf (4764 N)	3.1	1320 lbf (5871 N)		
750 ft (229 m)	767 lbf (3413 N)	0.8	1133 lbf (5041 N)	3.1	1393 lbf (6197 N)		
800 ft (244 m)	818 lbf (3640 N)	0.8	1195 lbf (5317 N)				
850 ft (259 m)	869 lbf (3868 N)	0.8	1257 lbf (5590 N)				
900 ft (274 m)	921 lbf (4095 N)	0.8	1318 lbf (5861 N)				
950 ft (290 m)	972 lbf (4323 N)	0.8	1378 lbf (6130 N)				

Vertical component of total SAG. Contact ES if more information needed

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SOLO® ADSS Short-Span Cables, 12-144 Fibers



Installation Conditions

97-144 Fibers

Code Short MDPF	1% Initial Installation SAG (Vertical)	NESC Light		NESC Medium		NESC Heavy	
		Vertical SAG (%)	Tension	Vertical SAG (%)	Tension	Vertical SAG (%)	Tension
Span	Tension	Vertical SAG (%)	Tension	Vertical SAG (%)	Tension	Vertical SAG (%)	Tension
50 ft (15 m)	82 lbf (365 N)	0.6	161 lbf (717 N)	1.7	202 lbf (898 N)	2.4	285 lbf (1267 N)
100 ft (30 m)	164 lbf (729 N)	0.6	285 lbf (1267 N)	2.0	348 lbf (1549 N)	2.8	479 lbf (2132 N)
150 ft (46 m)	246 lbf (1094 N)	0.7	397 lbf (1767 N)	2.2	479 lbf (2130 N)	3.1	649 lbf (2889 N)
200 ft (61 m)	328 lbf (1459 N)	0.7	503 lbf (2239 N)	2.4	601 lbf (2673 N)	3.4	806 lbf (3586 N)
250 ft (76 m)	410 lbf (1823 N)	0.8	606 lbf (2694 N)	2.5	717 lbf (3190 N)	3.6	954 lbf (4244 N)
300 ft (91 m)	492 lbf (2188 N)	0.8	705 lbf (3135 N)	2.6	829 lbf (3688 N)	3.7	1096 lbf (4873 N)
350 ft (107 m)	574 lbf (2553 N)	0.8	802 lbf (3567 N)	2.6	938 lbf (4173 N)	3.9	1232 lbf (5481 N)
400 ft (122 m)	656 lbf (2917 N)	0.8	897 lbf (3992 N)	2.7	1044 lbf (4646 N)	4.0	1365 lbf (6070 N)
450 ft (137 m)	738 lbf (3282 N)	0.8	992 lbf (4411 N)	2.8	1149 lbf (5110 N)		
500 ft (152 m)	820 lbf (3647 N)	0.8	1085 lbf (4825 N)	2.8	1252 lbf (5567 N)		
550 ft (168 m)	902 lbf (4011 N)	0.9	1177 lbf (5234 N)	2.9	1353 lbf (6017 N)		
600 ft (183 m)	984 lbf (4376 N)	0.9	1268 lbf (5641 N)				
650 ft (198 m)	1066 lbf (4741 N)	0.9	1359 lbf (6044 N)				

Vertical component of total SAG. Contact ES if more information needed

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Transmission Performance

Multimode				
Fiber Core Diameter (µm)	62.5	50	50	50
Fiber Category	OM1	OM2	OM3	OM4
Fiber Code	K	T	T	T
Performance Option Code	30	31	80	90
Wavelengths (nm)	850/1300	850/1300	850/1300	850/1300
Maximum Attenuation (dB/km)	3.4/1.0	3.0/1.0	3.0/1.0	3.0/1.0
Serial 1 Gigabit Ethernet (m)	300/550	750/500	1000/600	1100/600
Serial 10 Gigabit Ethernet (m)	33/-	150/-	300/-	550/-
Min. Overfilled Launch (OFL) Bandwidth (MHz*km)	200/500	700/500	1500/500	3500/500
Minimum Effective Modal Bandwidth (EMB) (MHz*km)	220/-	950/-	2000/-	4700/-

Single-mode					
Fiber Name	SMF-28e+® LL	SMF-28® Ultra fiber**	Single-mode (OS2)	Single-mode (OS2)	LEAF® fiber
Fiber Category	G.652.D	G.652.D/G.657.A1	G.652.D	G.652.D	G.655
Fiber Code	L	Z	E	E	F
Performance Option Code	22	22	00	01	01
Wavelengths (nm)	1310/1383/1550	1310/1383/1550	1310/1383/1550	1310/1383/1550	1310/1383/1550
Maximum Attenuation (dB/km)	0.34/0.34/0.22	0.34/0.34/0.22	0.35/0.35/0.25	0.4/0.4/0.3	-/-/0.25
Typical Attenuation* (dB/km)	0.32/0.32/0.18	0.32/0.32/0.18	-	-	-/-/0.19
Fiber Name	SMF-28® ULL				
Fiber Category	G.652				
Fiber Code	P				
Performance Option Code	19				
Wavelengths (nm)	1310/1383/1550				
Maximum Attenuation (dB/km)	0.33/-/0.19				
Typical Attenuation* (dB/km)	0.31/-/0.17				

* For more information on typical attenuation please see the Corning whitepaper at http://csmedia.corning.com/opcomm//Resource_Documents/whitepapers_r/ LAN-1863-AEN.pdf

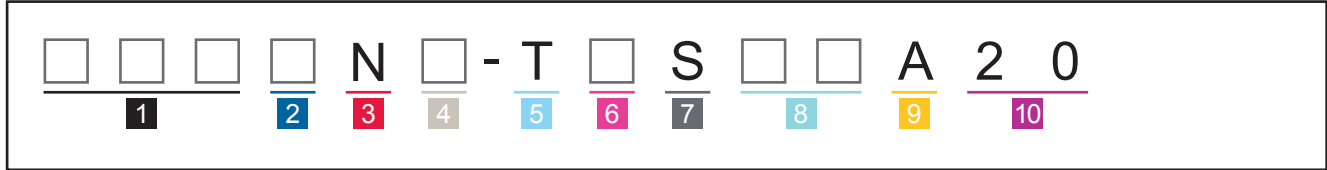
** SMF-28® Ultra fiber delivers up to 10x better macrobend loss performance compared to the G.652.D standard and up to 33 percent better macrobend loss performance than the G.657.A1 standard for 10mm radii bends.

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Ordering Information | Note: Contact Customer Care at 1-800-743-2675 for other options.



1 Select fiber count.
Standard offerings: 012-144

2 Select fiber code.
K = 62.5 μm multimode (OM1)
T = 50 μm multimode (OM2/OM3/OM4)
E = Single-mode (G.652.D)
Z = Single-mode (G.652.D/G.657.A1) SMF-28® Ultra fiber
P = Single-mode (G.652) SMF-28® ULL
F = Single-mode (G.655) LEAF®

3 Defines cable type.
N = SOLO® single-jacket cable
See Note 1.

4 Select outer jacket.
4 = PE jacket (standard)
A = TRPE jacket

5 Defines fiber placement.
T = 12 fibers/buffer tube (standard)

6 Select length markings.
3 = Markings in meters
4 = Markings in ft (standard)

7 Defines tensile strength.
S = SOLO short-span cable

8 Select performance option code.
30 = 62.5 μm multimode (OM1)
31 = 50 μm multimode (OM2)
80 = 50 μm multimode (OM3)
90 = 50 μm multimode (OM4)
01 = Single-mode (OS2) (Max. attenuation 0.4/0.4/0.3 dB/km)
00 = Single-mode (OS2) (Max. attenuation 0.35/0.35/0.25 dB/km)
22 = Single-mode (OS2) (Max. attenuation 0.34/0.34/0.22 dB/km)
19 = Single-mode (Ultra Low-Loss) (Max. attenuation 0.33/-/0.19 dB/km)
01 = Single-mode NZDSF* (Max. attenuation -/-/0.25 dB/km)
**Non-Zero Dispersion-Shifted Single-mode Fiber*

9 Defines cable type.
A = Gel-filled cable

10 Defines special manufacturing code.
20 = No special requirements



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